

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference RE/VB60547	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/EP 03/12793	International filing date (day/month/year) 13/11/2003	(Earliest) Priority Date (day/month/year) 15/11/2002
Applicant GLAXO GROUP LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. Certain claims were found unsearchable (See Box I).

3. Unity of invention is lacking (see Box II).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

HEPATITIS C VACCINE

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/ [REDACTED] 3/12793A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/18 C07K16/10 A61P31/14 A61K39/29

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, EMBASE, MEDLINE, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 01 30812 A (CHIRON CORP ;PALIARD XAVIER (US); SELBY MARK (US); HOUGHTON MICHAEL 3 May 2001 (2001-05-03) ✓ cited in the application page 3, line 23 - line 27 page 17, line 22 -page 18, line 2 page 22, line 19 - line 25 ----- -/-</p>	<p>1,2,4,9, 11,13-15 <i>in Spec</i></p>

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

29 March 2004

Date of mailing of the international search report

14/04/2004

Name and mailing address of the ISA

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Authorized officer

Irion, A

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB03/12793

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 38360 A (MEDINA SELBY ANGELICA ;CHIRON CORP (US); COIT DORIS (US); SELBY MA) 31 May 2001 (2001-05-31) page 3, line 16 -page 4, line 9 page 4, line 24 - line 31 page 6, line 23 - line 25 page 10, line 27 -page 11, line 7 page 26, line 22 page 27, line 1 - line 19 page 28, line 11 - line 14 page 44, line 17 - line 22 the whole document ---	1-4, 6-11, 13-15 5,12
Y	WO 96 10997 A (WAKITA TAKAJI ;ZURAWSKI VINCENT R JR (US); APOLLON INC (US); CONEY) 18 April 1996 (1996-04-18) page 12, line 18 - line 35 page 15, line 1 - line 15 ---	5
Y	WO 97 47358 A (SHIVER JOHN W ;DONNELLY JOHN J (US); LIU MARGARET A (US); LU TONG) 18 December 1997 (1997-12-18) cited in the application page 5, line 29 -page 10, line 8 page 18, line 8 - line 21 figures 12,13 ---	12
A	WO 96 37606 A (LIAO JAW CHING ;WANG CHENG NAN (TW); BIONOVA CORP (US)) 28 November 1996 (1996-11-28) cited in the application the whole document ---	1-15
A	WO 01 04149 A (US HEALTH) 18 January 2001 (2001-01-18) cited in the application the whole document ---	1-15
A	US 2002/141974 A1 (CHANG STEPHEN M W ET AL) 3 October 2002 (2002-10-03) the whole document ---	1-15
A	ALVAREZ-OBREGON J C ET AL: "A truncated HCV core protein elicits a potent immune response with a strong participation of cellular immunity components in mice" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 19, no. 28-29, 16 July 2001 (2001-07-16), pages 3940-3946, XP004247549 ISSN: 0264-410X abstract ----	1-15

INTERNATIONAL SEARCH REPORT

International Application No
PCT/ [REDACTED] 3/12793

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,Y	<p>MOORMAN JONATHAN P ET AL: "The C-terminal region of hepatitis C core protein is required for Fas-ligand independent apoptosis in Jurkat cells by facilitating Fas oligomerization." VIROLOGY, vol. 312, no. 2, 1 August 2003 (2003-08-01), pages 320-329, XP004446041 ISSN: 0042-6822 (ISSN print) the whole document -----</p>	5

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/EP 03/12793**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 13 and 14 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP03/12793

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 0130812	A 03-05-2001	AU 1236801 A CA 2389206 A1 EP 1232267 A2 JP 2003512826 T WO 0130812 A2 US 2003170274 A1 US 6562346 B1		08-05-2001 03-05-2001 21-08-2002 08-04-2003 03-05-2001 11-09-2003 13-05-2003
WO 0138360	A 31-05-2001	AU 2574601 A CA 2390082 A1 CN 1425027 T EP 1233982 A2 JP 2003516732 T WO 0138360 A2		04-06-2001 31-05-2001 18-06-2003 28-08-2002 20-05-2003 31-05-2001
WO 9610997	A 18-04-1996	AU 2033699 A AU 701747 B2 AU 4006195 A CA 2202088 A1 EP 0789563 A1 HU 77870 A2 JP 11501204 T NZ 296304 A WO 9610997 A1 US 2002161218 A1 US 6235888 B1 RU 2189254 C2 US 6025341 A		20-05-1999 04-02-1999 02-05-1996 18-04-1996 20-08-1997 28-09-1998 02-02-1999 29-06-1999 18-04-1996 31-10-2002 22-05-2001 20-09-2002 15-02-2000
WO 9747358	A 18-12-1997	AU 717542 B2 AU 3380897 A CA 2257137 A1 EP 1009763 A1 JP 2002500502 T WO 9747358 A1 US 2003053987 A1		30-03-2000 07-01-1998 18-12-1997 21-06-2000 08-01-2002 18-12-1997 20-03-2003
WO 9637606	A 28-11-1996	AU 5924396 A WO 9637606 A1		11-12-1996 28-11-1996
WO 0104149	A 18-01-2001	AU 6207700 A CA 2379235 A1 EP 1200465 A1 WO 0104149 A1 US 2002090607 A1		30-01-2001 18-01-2001 02-05-2002 18-01-2001 11-07-2002
US 2002141974	A1 03-10-2002	US 6297048 B1 AT 219522 T AU 3610293 A AU 7530996 A CA 2128896 A1 DE 69332045 D1 DE 69332045 T2 DK 625204 T3 EP 0625204 A1 ES 2174845 T3 JP 2000154152 A JP 7503615 T		02-10-2001 15-07-2002 01-09-1993 20-02-1997 05-08-1993 25-07-2002 17-10-2002 15-07-2002 23-11-1994 16-11-2002 06-06-2000 20-04-1995

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/ [REDACTED] 3/12793

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002141974 A1		JP 2003055265 A PT 625204 T WO 9315207 A2	26-02-2003 31-10-2002 05-08-1993